

transfecting a cell, which does not naturally express CD154, with a nucleic acid molecule encoding CD154.

2.(amended) The method of claim 1, wherein said cell is transfected with genomic DNA.

3.(amended) The method of claim 1, wherein said cell is transfected with cDNA.

4.(amended) The method of claim 1, wherein said cell is of mammalian origin.

5.(amended) The method of claim 4, wherein said cell is of human origin.

6.(amended) The method of claim 1, wherein said cell is selected from the group consisting of fibroblasts; keratinocytes; osteoblasts; chondrocytes; neurones; myocytes; hepatocytes; splenocytes; and pancreatic  $\beta$  cells.

7.(amended) The method of claim 1, wherein the tissue composition is used in the manufacture of a medicament for use in therapeutic tissue engineering.

8.(amended) The method of claim 1, wherein the tissue composition is used in the manufacture of a medicament for use in cosmetic tissue engineering.

9.(amended) A method for the manufacture of a medicament for use in tissue engineering, comprising

expressing CD154 in a cell or tissue from a vector which includes a nucleic acid molecule which encodes CD154, wherein said vector is adapted for recombinant expression of CD154.

10.(amended) The method of claim 9, wherein said vector comprises a cell/tissue specific promoter sequence.

11.(amended) The method of claim 10, wherein said promoter is cell/tissue specific for at least one tissue type selected from the group consisting of neuronal; smooth muscle; striated

muscle; cardiac muscle; bone; cartilage; liver; kidney; respiratory epithelium; endothelium; haematopoietic cells; spleen; pancreas; skin; stomach; intestine; oesophagus; and blood vessels.

12.(amended) An *in vitro* method to transfect a selected cell/tissue wherein said cell/tissue does not naturally express CD154, comprising:

- i) incubating cells/tissues under conditions conducive to the introduction and maintenance of a vector which includes a nucleic acid molecule which encodes CD154, wherein said vector is adapted for recombinant expression of CD154;
- ii) exposing said cells/tissues to an agent at a concentration sufficient such that at least those cells/tissues including said vector are selected for and optionally,
- iii) culturing said cells/tissues containing said vector; and, optionally further still,
- iv) storing said cultured cells/tissues.

14.(amended) A method according to claim 13 wherein said mammalian cell/tissue is of human origin.

15.(amended) A method according to claim 12 wherein said transfection is transient.

16.(amended) An organ comprising at least one cell, wherein said cell does not naturally express CD154, which cell has been transfected with a vector which includes a nucleic acid molecule which encodes CD154, wherein said vector is adapted for recombinant expression of CD154.

18.(amended) A therapeutic vehicle comprising a cell transfected according to claim 1.

19.(amended) A therapeutic vehicle according to claim 18 wherein said therapeutic vehicle is selected from the group consisting of prostheses; implants; matrices; stents; gauzes; bandages; plasters; biodegradable matrices; and polymeric films.

20.(amended) A cosmetic vehicle comprising a cell transfected according to claim 1.

**Added Section:****Related Applications**

This application is a national stage filing under 35 U.S.C. § 371 of PCT International application PCT/GB00/02652, filed July 10, 2000, which was published under PCT Article 21(2) in English.

**Amended Claims:**

1. (amended) A method for the manufacture of a tissue composition for use in tissue engineering, comprising [Use of] transfecting a cell, which does not naturally express CD154, [wherein said cell is transfected] with a nucleic acid molecule [DNA] encoding CD154[, for the manufacture of a tissue composition for use in tissue engineering].
- 2.(amended) The method of claim 1, [Use according to Claim 1] wherein said cell is transfected with genomic DNA.
- 3.(amended) The method of claim 1, [Use according to Claim 1] wherein said cell is transfected with cDNA.
- 4.(amended) The method of claim 1, [Use according to any of claims 1-3] wherein said cell is of mammalian origin.
- 5.(amended) The method of claim 4, [Use according to Claim 4] wherein said cell is of human origin.
- 6.(amended) The method of claim 1, [Use according to any of claims 1-5] wherein said cell is selected from the group consisting of [following cell types:] fibroblasts; keratinocytes; osteoblasts; chondrocytes; neurones; myocytes; hepatocytes; splenocytes; and pancreatic  $\beta$  cells.

7.(amended) The method of claim 1, wherein the tissue composition is [Use of a cell according to any of claims 1-6 for] used in the manufacture of a medicament for use in therapeutic tissue engineering.

8.(amended) The method of claim 1, wherein the tissue composition is [Use of a cell according to any of claims 1-6 for] used in the manufacture of a medicament for use in cosmetic tissue engineering.

9.(amended) A method for the manufacture of a medicament for use in tissue engineering, comprising [Use of]

expressing CD154 in a cell or tissue from a vector which includes a nucleic acid molecule which encodes CD154, wherein said vector is adapted for recombinant expression of CD154, for the manufacture of a medicament for use in tissue engineering].

10.(amended) The method of claim 9, [Use of a vector according to claim 9] wherein said vector comprises a cell/tissue specific promoter sequence.

11.(amended) The method of claim 10, [Use of a vector according to claim 10] wherein said promoter is cell/tissue specific for [one of the following] at least one tissue type[s:] selected from the group consisting of neuronal; smooth muscle; striated muscle; cardiac muscle; bone; cartilage; liver; kidney; respiratory epithelium; endothelium; haematopoietic cells; spleen; pancreas; skin; stomach; intestine; oesophagus; and blood vessels.

12.(amended) An *in vitro* method to transfect a selected cell/tissue wherein said cell/tissue does not naturally express CD154, comprising:

- v) incubating cells/tissues under conditions conducive to the introduction and maintenance of a vector which includes a nucleic acid molecule which encodes CD154, wherein said vector is adapted for recombinant expression of CD154 [according to any of claims 9-11];
- vi) exposing said cells/tissues to an agent at a concentration sufficient such that at least those cells/tissues including said vector are selected for and optionally,

- vii) culturing said cells/tissues containing said vector; and, optionally further still,
- viii) storing said [cell] cultured cells/tissues [prior to use].

14.(amended) A method according to claim [12 or] 13 wherein said mammalian cell/tissue is of human origin.

15.(amended) A method according to [any of] claim[s] 12[-14] wherein said transfection is transient.

16.(amended) An organ comprising at least one cell, wherein said cell does not naturally express CD154, which cell has been transfected with a vector which includes a nucleic acid molecule which encodes CD154, wherein said vector is adapted for recombinant expression of CD154 [according to any of Claims 9-11].

18.(amended) A therapeutic vehicle comprising a cell transfected according to [any of] claim[s] 1[-8].

19.(amended) A therapeutic vehicle according to claim 18 wherein said therapeutic vehicle is selected from the group consisting of: a prosthesis] prostheses; implants; matrices [matrix]; stents; gauzes; bandages; plasters; biodegradable matrices [matrix]; and polymeric films.

20.(amended) A cosmetic vehicle comprising a cell transfected according to [any of] claim[s] 1[-8].